

REMARKS

Claims 1-9, 11, 16-32 and 34 are all the claims pending in the application.

Claim Rejections - 35 U.S.C. § 103

Claims 1-9, 11, 16-32 and 34 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Uusikartano et al. (U.S. Pub. 2005/0099990, hereinafter “Uusikartano”) in view of Livet et al. (U.S. Pub. 2004/0132441, hereinafter “Livet”). Applicant respectfully traverses the rejection.

Claims 1, 9, and 11

In a third generation system (3G) such as a Universal Mobile Telecommunication System (UMTS), a Base Station System (BSS) receives a Packet Flow Context (PCF) message from a Serving GPRS Support Node (SGSN) for a Mobile Station (MS). However, in conventional systems, the BSS may not be informed of the MS's Enhanced General Packet Radio Service (EGPRS) capabilities (or more generally of the MS's radio capabilities or any information that could be used to optimize the support of services such as in particular real-time services in the packet-switched domain as explained) when the BSS receives the PCF message from the SGSN. *See e.g.* Specification, p. 9, l. 14 - p. 10, l. 15.

Applicant has, in particular, invented a method that allows the BSS to retrieve the MS's radio capabilities (or more generally any information that can be used together with QoS information to perform call admission control at the radio level) from a Serving GPRS Support Node (SGSN). This permits the optimization of real-time services in the packet-switched domain of such telecommunication systems.

Claim 1 recites, *inter alia*, “a request for the setting-up or reconfiguration of a radio bearer for a packet session for a mobile station, said request comprising first information derived from quality of service information contained in a corresponding request received by said core network entity; and adding, by said core network entity, to said request second information, that is known at a level of said core network entity and which is used, together with said first information, to perform a call admission control at the radio level.”

However, the combination of Uusikartano and Livet, taken alone or in combination, does not disclose or suggest the combination of features recited in claim 1. This is because neither Uusikartano nor Livet discloses receiving a request having quality of service (QoS) information at a core network entity, adding first information (based on the QoS information) to second information known at a level of the core network entity, and sending from the core network entity to a radio access network entity a request, having the first and second information used for call admission control, for setting up a packet session for a mobile station.

Instead, Uusikartano simply describes a Radio Access Bearer (RAB) location procedure that uses a QoS profile. Specifically, steps 2-7 and 3-7, respectively, in Figures 2 and 3 of Uusikartano illustrate that an SGSN performs the RAB procedure by communicating with a Universal Terrestrial Radio Access Network (UTRAN). However, Uusikartano is completely silent as to the content of a request sent from the SGSN (the purported “core network entity”) to the UTRAN (the purported “radio access network entity”). *See* Uusikartano, ¶¶ 28, 30. In other words, Uusikartano does not disclose that a message sent from the SGSN to the UTRAN includes “first information derived from quality of service information contained in a

corresponding request received by said core network entity” and “second information, that is known at a level of said core network entity,” as required by claim 1.

Moreover, Uusikartano does not disclose that the “first information” and “second information” are used “together...to perform a call admission control at the radio level.” Rather, as discussed above, Uusikartano only discloses QoS information used in the RAB procedure and does not disclose and or suggest any other information that can be used together with QoS information for call admission control. Thus, Uusikartano is nothing more than an example of a conventional technique that simply uses a QoS profile and fails to add any sort of second information known at the SGSN level to the QoS profile. Further, since Uusikartano merely discloses the RAB procedure, there is no teaching or suggestion that any sort of information is used “to perform a call admission control at the radio level.”

Similarly, Livet also fails to teach or suggest the combination of features recited in claim 1 and does not cure the deficient disclosure of Uusikartano. In particular, Livet is directed to RRM (Radio Resource Management) involving only a radio access network. *See e.g.*, Livet, Abstract. At best, Livet merely mentions that a core network entity is part of the architecture of a conventional UMTS network. *See* Livet, ¶ 6. However, there is no teaching or suggestion that that a message sent from a core network includes “first information derived from quality of service information contained in a corresponding request received by said core network entity” and “second information, that is known at a level of said core network entity,” as required by claim 1. In fact, there is absolutely no disclosure of a core network entity sending such requests.

At best, Livet only discloses a conventional call admission control procedure. In Livet, the RRM is a Radio Resource Management algorithm, and a Finite State Machine (FSM) approach is used for RRM. *See* Livet, ¶¶ 10, 12. In Livet, when in the normal load state 100, where the traffic is expected to be low, the FSMs preferably use maximum bit rate for the user's admission (CAC). Background TS Load Balancing also functions to spread out the load over all the TS, so that no TS encounters load congestion. When the FSMs are in the high load state 200, the traffic starts to be high in most of the TS. To prevent cell overload, new resources are preferably allocated based on the RAB Guaranteed Bit Rate. RABs operating with a rate higher than the Guarantee Bit Rate are decreased to the Guarantee Bit Rate. This preventive action allows freeing resources for new admission. *See* Livet, ¶¶ 48-49. In other words, Livet only discloses the RRM monitoring the wireless communication and toggling a state based on the wireless communication load as explained above.

Accordingly, even if Uusikartano and Livet could have somehow been combined, the combination of Uusikartano and Livet would still not contain all the features in claim 1. As a result, claim 1 and its dependent claims would not have been rendered unpatentable by the combination of Uusikartano and Livet for at least these reasons.

To the extent the Examiner's position is loosely based on the assertion that the combination of Uusikartano and Livet allegedly renders claim 1 unpatentable, Applicant respectfully resubmits that a person having ordinary skill in the art would not have combined Uusikartano and Livet in the manner suggested by the Examiner, *i.e.*, to promote QoS. *See* Office Action, p. 4.

In the Amendment filed on October 1, 2008, Applicant previously submitted that a person having ordinary skill in the art would not have combined Uusikartano and Livet. *See* “Remarks,” pp. 4-5. However, the Examiner does not respond to the Applicant’s arguments in any fashion whatsoever. Applicant respectfully submits that where the Applicant traverses any rejection, the Examiner should, if he or she repeats the rejection, take note of the Applicant’s argument **and answer the substance of it**. (MPEP § 707.07(f) “Answer All Materials Traversed”), so as to expedite the prosecution for this application and to ensure a complete record of the prosecution history.

Further, the Examiner has still not explained *how* and *why* the proposed modification would improve the QoS. In fact, one of ordinary skill in the art would not have been motivated to include information of Uusikartano with the CAC procedure disclosed in Livet at least because the information of Uusikartano deals with RAB location procedure, and not the CAC procedure of Livet. Accordingly, claim 1 and its dependent claims would not have been rendered unpatentable by the combination of Uusikartano and Livet for at least these additional reasons.

Claims 2 and 35

With respect to claims 2 and 35, in the Amendment filed on October 1, 2008, Applicant previously submitted that the combination of Uusikartano and Livet would not have rendered claims 2 and 35 unpatentable. *See* “Remarks,” pp. 4-5. Again, however, the Examiner fails to provide any response. Accordingly, those arguments remain applicable.

With respect to the dependent claim 2, Applicant respectfully submits that, contrary to the Examiner's allegations, there is no disclosure or even remote suggestion of the information known at the core network entity level and added to the request being representative of the radio access capabilities, as set forth in claim 2. The Examiner relies on ¶ 22 of Uusikartano, which only discloses TFT parameters, which are filtering bases, and does not disclose or suggest adding to the request information additional information (known at the core network entity level) representative of radio access capabilities. Livet does not cure the above-identified deficiencies of Uusikartano. For at least these additional exemplary reasons, claim 2 is patentable over the prior art of record.

With respect to the dependent claim 35, Applicant respectfully submits that, contrary to the Examiner's allegations, there is no disclosure or even remote suggestion of the request for the setting-up or the reconfiguration of a corresponding radio bearer being sent in a CREATE BSS PFC message, as set forth in claim 35. Uusikartano only discloses that the core network controls the set-up, modification, and disassembly of RAB over the UTRAN, and that modification request may be initiated by various entities. *See* Uusikartano, ¶¶ 20, 23. However, Uusikartano does not disclose a CREATE BSS PFC message. Livet does not cure the above-identified deficiencies of Uusikartano. For at least these additional exemplary reasons, claim 35 is patentable over Uusikartano in view of Livet.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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